# Install & Configure Apache with PHP, JSP, MySQL, and PHPMyAdmin on Windows 2000/XP

Revision 5 Jeff Lundberg – contact@jefflundberg.com

This is a quick guide to install and configure the Apache web-server with PHP and JSP support on a Windows XP Pro SP2 machine. Let me know if this helps you out! Feedback is appreciated. This is my first "published" guide. I made it for my own reference. Why not share?

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#### Versions used:

Apache	2.0.52
PHP	5.0.3
Tomcat	5.5.4
Java 2 Standard Edition	5.0
MySQL	4.1.7
MyODBC	3.51.10
Connector/ODBC	
PHPMyAdmin	2.6.0, patch level 3

### Change Log:

2004.12.16	Jeff Lundberg	Updated to PHP 5.0.3
		Fixed PHP mysql module problems
		Fixed PHPMyAdmin
		Updated some screenshots
2004.11.24	Jeff Lundberg,	Upgraded all versions.
	Mark Gearhart	<ul> <li>Updated Tomcat installation Instructions (thanks to Mark Gearhart for some updates).</li> </ul>
		• Verified everything works with Windows XP SP2. (except mysql support in PHP!)
		<ul> <li>New screenshots – now featuring Firefox.</li> </ul>
		Reverted back to WinXP. Still works in 2000.
2003.08.18	Rob Garry	Changed workers.properties file
	rob.garry@bentley.com	Used mod_jk2 connector
		Updated version numbers
		• Using Windows 2000 instead of XP. (C:\WINDOWS becomes C:WINNT)
2002.08.01	Jeff Lundberg,	Changed workers.properties file – the ajp14 stuff was removed
	Andrew Conrad,	Modified php.ini. Changed the following:
	Rick Reumann,	include_path = ".;c:\php\includes"
	Dallas Thunder	<pre>session.save_path = C:\Temp</pre>
		session.cookie_path = \
2002.07.31	Jeff Lundberg	<ul> <li>Modified workers.properties file – some paths were for older versions of Tomcat</li> </ul>
2002.07.26	Jeff Lundberg	<ul> <li>Modified step 5 of JSP install - hardcoded the Tomcat</li> </ul>
		configuration into the Apache httpd.conf file.
		<ul> <li>Also added MySQL installation instructions.</li> </ul>

## Download the Components

Before you can begin, you must first download all the required components. The components used in this tutorial are listed below. You may want to download the latest versions. The versions used in the tutorial have been verified to work.

### Apache Web Server

- <u>http://httpd.apache.org/</u>
- http://httpd.apache.org/dist/httpd/binaries/win32/
- apache\_2.0.52-win32-x86-no\_ssl.msi

#### PHP

- http://www.php.net/
- http://www.php.net/downloads.php
- php-5.0.3-Win32.zip
- Note: Choose PHP 4 if you wish to use PHPMyAdmin. It didn't work out of the box with PHP 5. Some additional configuration is required. If you get it to work with PHP 5, please drop me a line: <u>contact@jefflundberg.com</u>.

#### JSP

- Tomcat (<u>http://jakarta.apache.org/site/binindex.cgi</u>)
- jakarta-tomcat-5.5.4.exe
- JK2 Connector
  - <u>http://apache.mirrors.esat.net/jakarta/tomcat-connectors/jk2/binaries/win32/</u>
  - jakarta-tomcat-connectors-jk2.0.4-win32-apache2.0.49.zip
- Java
  - Download the latest Java Runtime.
  - http://java.sun.com/
    - Click on J2SE (Core/Desktop)
    - Click on J2SE 5.0
    - Click **Downloads** (on the left hand side)
    - Click **Download JRE**
    - Accept & click Continue
    - Under "Windows Platform", choose the "Windows Offline Installation"
  - jre-1\_5\_0-windows-i586.exe

#### MySQL

- MySQL Database
  - http://dev.mysql.com/downloads/mysql/
  - Download the latest stable release for Windows
  - mysql-4.1.7-win.zip
- MyODBC
  - <u>http://www.mysql.com/downloads/</u>
  - Download the latest stable release of Connector/ODBC for Windows
  - MyODBC-3.51.10-x86-win-32bit.msi
- PHPMyAdmin
  - http://www.phpmyadmin.net/
  - Download the latest stable release of PHPMyAdmin (.php files)
  - phpMyAdmin-2.6.0-pl3.zip

### Install Components

Now that you have the necessary files, you can begin the installation process. We will install Apache, PHP, then the Java SDK and Tomcat.

#### Note to Windows 2000 users:

This guide should work with Windows 2000 as well. Remember to replace C:\WINDOWS with C:\WINNT anywhere in this document.

# Apache

1. Run apache\_2.0.52-win32-x86-no\_ssl.msi



🖟 Anacha HTTD Sarvar 2.0 - Installation Wizard
Deace read the following license agreement carefully
Anache License 🔊
Version 2.0, January 2004
TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION
1. Definitions.
"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.
⊙ I accept the terms in the license agreement
$\bigcirc$ I do not accept the terms in the license agreement
InstallShield
<pre>&lt; Back Next &gt; Cancel</pre>
🗒 Apache HTTP Server 2.0 - Installation Wizard 🛛 🛛 🔀
Bache HTTP Server 2.0 - Installation Wizard
Bead This First Read this Before Running Apache on Windows.
Apache HTTP Server 2.0 - Installation Wizard      Read This First      Read this Before Running Apache on Windows.
Apache HTTP Server 2.0 - Installation Wizard      Read This First      Read this Before Running Apache on Windows.      Apache HTTP Server
Apache HTTP Server 2.0 - Installation Wizard      Read This First     Read this Before Running Apache on Windows.      Apache HTTP Server      Apache HTTP Server      What is it?      The Apache HTTP Server is a powerful and flexible HTTP/1.1 compliant web server.      Originally designed as a replacement for the NCSA HTTP Server, it has grown to be the most popular web server on the Internet. As a project of the Apache Software Foundation, the developers aim to collaboratively develop and maintain a robust, commercial-grade, standards-based server with freely available source code.
Apache HTTP Server 2.0 - Installation Wizard  Read This First Read this Before Running Apache on Windows.  Apache HTTP Server  Apache HTTP Server  What is it?  The Apache HTTP Server is a powerful and flexible HTTP/1.1 compliant web server.  Originally designed as a replacement for the NCSA HTTP Server, it has grown to be the most popular web server on the Internet. As a project of the Apache Software Foundation, the developers aim to collaboratively develop and maintain a robust, commercial-grade, standards-based server with freely available source code.  The Latest Version Details of the latest version can be found on the Apache HTTP server project page under:
Apache HTTP Server 2.0 - Installation Wizard  Read This First Read this Before Running Apache on Windows.  Apache HTTP Server  Apache HTTP Server  What is it?  The Apache HTTP Server is a powerful and flexible HTTP/1.1 compliant web server.  Originally designed as a replacement for the NCSA HTTP Server, it has grown to be the most popular web server on the Internet. As a project of the Apache Software Foundation, the developers aim to collaboratively develop and maintain a robust, commercial-grade, standards-based server with freely available source code.  The Latest Version Details of the latest version can be found on the Apache HTTP server project page under:  http://httpd.apache.org/
Apache HTTP Server 2.0 - Installation Wizard  Read This First Read this Before Running Apache on Windows.  Apache HTTP Server  Apache HTTP Server  What is it?  The Apache HTTP Server is a powerful and flexible HTTP/1.1 compliant web server.  Originally designed as a replacement for the NCSA HTTP Server, it has grown to be the most popular web server on the Internet. As a project of the Apache Software Foundation, the developers aim to collaboratively develop and maintain a robust, commercial-grade, standards-based server with freely available source code.  The Latest Version Details of the latest version can be found on the Apache HTTP server project page under:  http://httpd.apache.org/

2. Fill in the information and choose "for All Users, on Port 80, as a Service --Recommended" when prompted.

	Server 2.0 - Installation Wizard 🛛 💦 💦
Server Informa	ation
Please enter yo	ur server's information.
Network <u>D</u> omair	n (e.g. somenet.com)
Server Name (e	.g. www.somenet.com):
Administrator's	Email Address (e.g. webmaster@somenet.com):
J Install Apache H	ITTP Server 2.0 programs and shortcuts for:
💿 for All Use	rs, on Port 80, as a Service Recommended.
🔘 only for th	e Current User, on Port 8080, when started Manually.
InstallShield	
	< Back Next > Cancel
_	
👸 Apache HTTP	Server 2.0 - Installation Wizard
Setup Type Choose the setu	
	up type that best suits your needs.
Please select a	up type that best suits your needs.
Please select a	up type that best suits your needs.
Please select a s	up type that best suits your needs.
Please select a solution of the select a solut	up type that best suits your needs.
Please select a s	up type that best suits your needs. setup type. Typical program features will be installed. (Headers and Libraries for compiling modules will not be installed.) Choose which program features you want installed and where they will be installed. Recommended for advanced users.
Please select a selec	up type that best suits your needs.
Please select a s	up type that best suits your needs. setup type. Typical program features will be installed. (Headers and Libraries for compiling modules will not be installed.) Choose which program features you want installed and where they will be installed. Recommended for advanced users.

Destination Folder
Click Change to install to a different folder
Install Apache HTTP Server 2.0 to the folder: C:\Program Files\Apache Group\ Change
InstallShield
🛃 Apache HTTP Server 2.0 - Installation Wizard 🛛 🔀
Ready to Install the Program       The wizard is ready to begin installation.
Click Install to begin the installation.
Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.

🛃 Apache	HTTP Server 2.0 - Installation Wizard 📃 🗆 🔀
Installing The prog	Apache HTTP Server 2.0.52 ram features you selected are being installed.
15	Please wait while the Installation Wizard installs Apache HTTP Server 2.0.52. This may take several minutes.
	Status:
InstallShield	
т пъсакот пета –	< Back Next > Cancel

3. Finish the installation program.



4. Select **Unblock** on the Windows Security Alert.

J	To help protect your computer, Windows Firewall has block some features of this program.	ed
)o you	ı want to keep blocking this program?	
	Name: Apache HTTP Server Publisher: Apache Software Foundation	
	Keep Blocking Unblock Ask Me Later	r

5. **Test:** Open <u>http://localhost</u> in a web browser. If you see something like that following, you've just successfully installed Apache!

😉 Test Page for Apache Installation - Mozilla Firefox 📃 🗖	X
<u>File Edit View Go Bookmarks Tools H</u> elp	
If you can see this, it means that the installation of the <u>Apache web server</u> software on this system was successful. You may now add content to this directory and replace this page.  Seeing this instead of the website you expected?	
This page is here because the site administrator has changed the configuration of this web server. Please <b>contact the person responsible for maintaining this server with questions</b> . The Apache Software Foundation, which wrote the web server software this site administrator is using, has nothing to do with maintaining this site and cannot help resolve configuration issues.	
You are free to use the image below on an Apache-powered web server. Thanks for using Apache!	
Done	

# PHP

1. Extract php-5.0.3-Win32.zip into C:\php



- Copy and rename c:\php\php.ini-recommended to C:\php\php.ini
   Note: Before, we used to copy php.ini to the C:\WINDOWS directory. This is not required with the Apache "PHPIniDir" directive pointing to c:\php.
- 3. Open php.ini and change the following and then save it.

```
include_path = ".;C:\php\includes\"
session.save_path = "C:\Temp"
session.cookie_path = \
doc_root = "C:\Program Files\Apache Group\Apache2\htdocs"
extension_dir = "C:\php\ext\"
extension=php_mysql.dll
extension=php_mysqli.dll
mysql.default_port = 3306
mysql.default_user = root
mysqli.default_host = localhost
mysqli.default_host = localhost
mysqli.default_user = root
```

- 4. Add C:\php to your PATH System Environment Variable.
  - a. Right-click on My Computer and choose **Properties**.

- b. Select the Advanced tab.
- c. Click Environment Variables.
- d. Under System variables, select "Path" and choose Edit.
- e. Move the cursor to the end of the string and add ;C:\php.

**Note:** If you don't want to add C:\php to your path, you may copy libmysqli.dll and libmysql.dll to your C:\Windows\System directory.

5. Add the following lines to *httpd.conf*: **Note:** httpd.conf is located in C:\Program Files\Apache Group\Apache2\conf\

```
LoadModule php5_module "c:/php/php5apache2.dll"
AddType application/x-httpd-php .php
PHPIniDir "C:/php"
```

6. Change the following line in the *httpd.conf*. **Note:** If you don't plan on adding JSP support, don't add index.jsp.

```
From:
DirectoryIndex index.html index.html.var
To:
DirectoryIndex index.php index.jsp index.html index.html.var
```

7. **Test:** Restart Apache & open <u>http://localhost</u> in a web browser. Hopefully you see the same thing as before.

Hint: To quickly restart Apache, simply left-click (once) on the Apache system tray icon.





8. Test: Create a new text file called *phpinfo.php*. Paste the following into it.

#### phpinfo.php

_	
	php phpinfo();?

Save the document under C:\Program Files\Apache Group\Apache2\htdocs. Now open <u>http://localhost/phpinfo.php</u> in a web browser. You should see something like the following:

phpinfo() - Mozilla Firefox		
e <u>E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> ookmarks <u>T</u> ools <u>H</u> elp		
Þ • 🛶 • 🥰 💿 🚷 🗋 http://localh	ost/phpinfo.php 🔽 🙆 Go 💽	
PHP Version 5.0.3	php	
System	Windows NT VMWAREXPPROSP2 5.1 build 2600	
Build Date	Dec 15 2004 08:06:41	
Configure Command	cscript/nologo.configure.js "enable-snapshot-build" "with-gd=shared"	
Server API	Apache 2.0 Handler	
Virtual Directory Support	enabled	
Configuration File (php.ini) Path	C:\php\php.ini	
PHP API	20031224	
PHP Extension	20041030	
Zend Extension	220040412	
Debug Build	no	
Thread Safety	enabled	
IPv6 Support	enabled	
Registered PHP Streams	php, file, http, ftp, compress.zlib	
Registered Stream Socket Transports	tcp, udp	
-		

To check if the modules are loading correctly, scroll down. If the modules are working, you should see a section for "mysql" and "mysqli".

	oinro.pnp		
	mysql		
MySQL S	upport	enabled	
Active Persistent Links		0	
Active Links		0	
Client API version		4.1.7	
Direction	LocalValue	Master Value	
mysgLallow persistent	On	On	
mysql.connect_timeout	60	60	
mysql.default_host	localhost	localhost	
mysql.default_password	no value	no value	
mysql.default_port	3306	3306	
mysql.default_socket	no value	no value	
mysql.default_user	root	root	
mysql.max_links	Unlimited	Unlimited	
mysql.max_persistent	Unlimited	Unlimited	
mysql.trace_mode	Off	Off	

# JSP

### 1. Run jre-1\_5\_0-windows-i586.exe

😸 J2SE Runtime Environment 5.0 - License	
License Agreement Please read the following license agreement carefully.	& <u>Sun</u>
Sun Microsystems, Inc. Binary Code License Agreement	^
for the JAVA 2 PLATFORM STANDARD EDITION RUNTIME ENVIRONMENT 5.0	
SUN MICROSYSTEMS, INC. ("SUN") IS WILLING TO LICENSE THE SOFTWARE IDENTIFIE BELOW TO YOU ONLY UPON THE CONDITION THAT YOU ACCEPT ALL OF THE TERM CONTAINED IN THIS BINARY CODE LICENSE AGREEMENT AND SUPPLEMENTAL LICE TERMS (COLLECTIVELY "AGREEMENT"). PLEASE READ THE AGREEMENT CAREFUL DOWNLOADING OR INSTALLING THIS SOFTWARE, YOU ACCEPT THE TERMS OF TH AGREEMENT. INDICATE ACCEPTANCE BY SELECTING THE "ACCEPT" BUTTON AT TH BOTTOM OF THE AGREEMENT. IF YOU ARE NOT WILLING TO BE BOUND BY ALL TH SELECT THE "DECLINE" BUTTON AT THE BOTTOM OF THE AGREEMENT AND THE	IED MS NSE LY. BY E E E TERMS,
<ul> <li>I accept the terms in the license agreement</li> </ul>	
I do not accept the terms in the license agreement	
InstallShield Next >	Cancel



闄 J2SE Ru	intime Environment 5.0 - Progress 📃 🗖 🖂
Installing The prog	ram features you selected are being installed.
17	Please wait while the Install Wizard installs J2SE Runtime Environment 5.0. This may take several minutes.
	Status:
InstallShield –	
	< Back Next >

😸 J2SE Runtime Environment 5.0 - Complete 🛛 🛛 🔀	
	Installation Completed
	The Install Wizard has successfully installed J25E Runtime Environment 5.0. Click Finish to exit the wizard.
Sun Java	
	< Back Finish Cancel

2. Run jakarta-tomcat-5.5.4.exe.



🗷 Apache Tomcat Setup 📃 🗆 🔀
License Agreement Please review the license terms before installing Apache Tomcat.
Press Page Down to see the rest of the agreement.
Apache License Version 2.0, January 2004 http://www.apache.org/licenses/
TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION
1. Definitions.
"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.
If you accept the terms of the agreement, click I Agree to continue. You must accept the agreement to install Apache Tomcat.
Nullsoft Install System v2.0
< Back I Agree Cancel

 Select service to have Tomcat automatically startup when Windows starts. Note: If you want to run some tests later, install the Examples as well. The examples allow you to test everything to make sure it's all working properly.

🛃 Apache Tomcat Setup				
Choose Components Choose which features of Apac	he Tomcat you want to install.	-		
Check the components you war install. Click Next to continue.	Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.			
Select the type of install:	Custom			
Or, select the optional components you wish to install:	Tomcat  Tomcat  Core  Service  Start Menu Items  Documentation  Examples  Webapps	Description Hover your mouse over a component to see its description.		
Space required: 11.4MB				
Nullsoft Install System v2.0				
	< <u>B</u> ack	Next > Cancel		

🔀 Apache Tomcat Setup		
Choose Install Location Choose the folder in which to install Apache Tomcat.		
Setup will install Apache Tomcat in the following folder. To install in a different folder Browse and select another folder. Click Next to continue.	, click	
Destination Folder		
C:\Program Files\Apache Software Foundation\Tomcat 5.5 Browse		
Space required: 10.0MB Space available: 1.8GB Nullsoft Install System v2.0 <back next=""></back>	Canco	el

4. Type in some admin password you can remember. Leave it on port 8080.

🔀 Apache Tomcat Setup: Configuration	Options 📃 🗆 🔀
<b>Configuration</b> Tomcat basic configuration.	
HTTP/1.1 Connector Port	8080
Administrator Login	
User Name	admin
Password	
Nullsoft Install System v2.0	< <u>Back</u> <u>N</u> ext > Cancel

🗷 Apache Tomcat Setup: Java Virtua	Machine path selection 💦 🗔 🔀
<b>Java Virtual Machine</b> Java Virtual Machine path selection.	
Please select the path of a J2SE 5.0 JRE inst	alled on your system:
C:\Program Files\Java\jre1.5.0	
Nullsoft Install System v2,0	< Back Install Cancel

💌 Apache Tomcat Setup	Z
Installing Please wait while Apache Tomcat is being insta	illed.
Extract: deployer-howto.html	
Show details	
Nullsoft Tostall System v2.0	
	< Back Next > Cancel

5. Click Finish.



6. **Test:** Start Tomcat. If you chose Run Apache Tomcat on the previous screen, it will start automatically.



You should see two icons in your system tray at this time.

Open http://localhost:8080/ in a web browser. You should see something like the following:

🕹 🧿



- Extract mod\_jk2.so from jakarta-tomcat-connectors-jk2.0.4-win32-apache2.0.49.zip to C:\Program Files\Apache Group\Apache2\modules.
- 8. Add the following to the "Load Modules" section of your Apache http.conf file LoadModule jk2\_module modules/mod\_jk2.so

9. Create a new text document called **workers2.properties**. Save this document in the following directory: C\Program Files\Apache Group\Apache2\conf. Put this text into the file:

```
[shm]
file=C:\Program Files\Apache Group\Apache2\logs\jk2.shm
size=1048576
[channel.socket:localhost:8009]
port=8009
host=127.0.0.1
[ajp13:localhost:8009]
channel=channel.socket:localhost:8009
[status:status]
[uri:/jsp-examples/*]
worker=ajp13:localhost:8009
[uri:/status/*]
worker=status:status
```

10. Add the following to the end of the **jk2.properties** file located in C:\Program Files\Apache Software Foundation\Tomcat 5.5\conf\:

```
handler.list=channelSocket,request
channelSocket.port=8009
channelSocket.address=127.0.0.1
```

11. **Note:** Always start Tomcat first and then start Apache. If you have to bounce Tomcat, remember to take down Apache first and restart it after Tomcat restarts.

**Test:** Begin by shutting down both Apache and Tomcat. Start the Tomcat service. Open <u>http://localhost:8080/</u> in a web browser. You should see something like the following:



If you installed the examples, test out the JSP Examples as well as the Servlet Examples to make sure they work. If they do not work, something is wrong with your Tomcat installation. (It's much easier to stop the Tomcat service, uninstall it, and start over again. Troubleshooting this is not fun as there's little documentation available.)

**Test:** Start up the Apache2 service and open <u>http://localhost/</u> in a web browser. Still working?

Test: Now try http://localhost/phpinfo.php to make sure that's still in working order.

**Final Test:** Open <u>http://localhost/jsp-examples/</u> in a browser, you should see something like the following:

🥹 JSP Examples - Mozilla Firefox	- 🗆 🗙
<u>File Edit View Go Bookmarks Iools H</u> elp	$\langle \rangle$
🔶 • 🛶 - 🎯 💿 🏠 🗋 http://localhost/jsp-examples/ 💽 💿 Go 💽	
JSP Samples	^
This is a collection of samples demonstrating the usage of different parts of the Java Server Pages (JSP) specification. B JSP 2.0 and JSP 1.2 examples are presented below.	oth
These examples will only work when these pages are being served by a servlet engine; of course, we recommend <u>Tome</u> They will not work if you are viewing these pages via a "file://" URL.	<u>at</u> .
To navigate your way through the examples, the following icons will help:	
Execute the example	
🔎 Look at the source code for the example	
The Return to this screen	
Tip: For session scoped beans to work, the cookies must be enabled. This can be done using browser options.	
JSP 2.0 Examples	
Expression Language	
Basic Arithmetic 🎇 Execute 🖉 Source	
Basic Comparisons <u>Execute</u> <u>Source</u>	~
Done	4

# **MySQL**

1. Run **setup.exe** from mysql-4.1.7-win.zip.





Hysql s	Server 4.1 - Setup Wizard
Ready to	Install the Program
The wiza	rd is ready to begin installation.
If you wa exit the v	ant to review or change any of your installation settings, click Back. Click Cancel to wizard.
Current S	ettings:
Setup Ty	/pe:
Турі	cal
Destinat	ion Folder:
C:\P	rogram Files\MySQL\MySQL Server 4.1\
1	
1	
P MySQL S	Gerver 4.1 - Setup Wizard
Installing	MySQL Server 4.1
The prog	ram features you selected are being installed.
1	Please wait while the Setup Wizard installs MySQL Server 4.1. This may take several minutes.
	Statuc

< Back

1

Next >

Cancel

MySQL.com Sign Up - Setup Wizard	$\overline{\mathbf{X}}$
MySQL.com Sign-Up Login or create a new MySQL.com account.	$\bigcirc$
Please log in or select the option to create a new account.	
U creace a new rree mysuc.com account	
If you do not yet have a MySQL.com account, select this option and complete the following three steps.	
🔿 Login to MySQL.com	
Select this option if you already have a MySQL.com account. Please specify your login information below.	
Email address:	
Password:	
⊙ Skip Sign-Up	
Next >	Cancel





#### Standard Configuration



**onfiguration** Use this only on machines that do not already have a MySQL server installation. This will use a general purpose configuration for the server that can be tuned manually.



MySQL Server Instance Configuration Wizard	X
MySQL Server Instance Configuration         Configure the MySQL Server 4.1 server instance.	
Please set the Windows service options.	
✓ Install As Windows Service	
This is the recommended way to run the MySQL server on Windows.	
Service Name: MySQL	
✓ Launch the MySQL Server automatically	
< Back Next > Cancel	

Enter a root password, confirm it, and then click **Next >**.

MySQL Server I	nstance Configuratio	n Wizard	X
<b>MySQL Server</b> Configure the I	Instance Configuration MySQL Server 4.1 server in	nstance.	
Please set the	security options.		
Modify Sec	curity Settings		
	New root password:		Enter the root password.
root	Confirm:		Retype the password.
		Root may only	connect from localhost
Create An Anonymous Account This option will create an anonymous account on this server. Please note that this can lead to an insecure system.			
		< Back	Next > Cancel

MySQL Server Instance Configuration Wizard
MySQL Server Instance Configuration
Configure the MySQL Server 4.1 server instance.
Ready to execute
<ul> <li>Prepare configuration</li> <li>Write configuration file</li> <li>Start service</li> <li>Apply security settings</li> </ul>
Please press [Execute] to start the configuration.
< Back Execute Cancel
MySQL Server Instance Configuration Wizard

MySQL Server Instance Configuration wizard	
<b>MySQL Server Instance Configuration</b> Configure the MySQL Server 4.1 server instance.	$\bigcirc$
Processing configuration	
<ul> <li>Prepare configuration</li> <li>Write configuration file (C:\Program Files\MySQL\MySQL Ser</li> <li>Start service</li> <li>Apply security settings</li> <li>Configuration file created.</li> <li>Windows service MySQL installed.</li> <li>Service started successfully.</li> <li>Security settings applied.</li> <li>Press [Finish] to close the Wizard.</li> </ul>	∿er 4.1¦my.inî)
< Back Finish	Cancel

2. **Test:** Open a command prompt and navigate to C:\Program Files\MySQL\MySQL Server 4.1\bin\ Type in the command mysqlshow -u root -p. Enter the password you supplied earlier. It should display the current databases.



# **MyODBC**

1. Run MyODBC-3.51.06.exe. Note: Installing MyODBC is optional.



H MyODBC Setup	$\overline{\mathbf{v}}$
License Agreement You must agree with the license agreement below to proceed.	N
GNU GENERAL PUBLIC LICENSE	-
Version 2, June 1991	
Copyright (C) 1989, 1991 Free Software Foundation, Inc. 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA	
Everyone is permitted to copy and distribute verbatim copies	
of this license document, but changing it is not allowed.	~
I accept the license agreement     I do not accept the license agreement  MySQL AB  Reset  KBack Next > Cancel	
🛃 MyODBC Setup	×
Readme Information The following information describes this installation.	N
Welcome!	_
This installation will copy several files to the destination machine and register the driver.	
- myodbc3.dll (ODBC driver - built using MySQL v4.1.6 client) - myodbc3S.dll (ODBC driver setup)	
It is usually best to uninstall any existing MyODBC driver before installing a new version. Under certian circumstances an uninstall may not actually remove the files from your system. If you have uninstalled MyODBC and still find these files on your system you can probably remove them. This may help to ensure a trouble-free installation of MyODBC in the future.	
Enjoy Peter Harvey	

< Back

Next >

Cancel

MySQL AB

븅 MyODBC Setup	Z
Ready to Install the Application	E
Click Next to begin installation.	MySQL
Click the Back button to reenter the installation information or click Cance the wizard.	I to exit
MySQL AB® <a>K Next &gt;</a>	Cancel
岁 MyODBC Setup	
Updating System	D
The features you selected are currently being installed.	MysqL
Initializing	
Wise Installation Wizard®	

Cancel

### 2. Click Finish.

謾 MyODBC Setup	
	MyODBC has been successfully installed.
MySQL.	Click the Finish button to exit this installation.
	< Back Finish Cancel

# PHPMyAdmin

1. Extract phpMyAdmin-2.6.0-pl3.zip to your *htdocs* directory and rename it to something like "phpmyadmin" (e.g. C:\Program Files\Apache Group\Apache2\htdocs\phpmyadmin).

**Note:** You may want to use a .htaccess file or use the following to prevent random people from accessing PHPMyAdmin.

2. Open the config.inc.php (in the phpmyadmin directory) in your favorite text editor and modify the following variables:



3. Open <a href="http://localhost/phpmyadmin/">http://localhost/phpmyadmin/</a> and login using "root" (password is whatever you set it to earlier).



Congratulations!!!

#### Resources

Apache http://www.apache.org/

PHP http://www.php.net/

Perl http://www.perl.com/

http://www.activestate.com/

### JSP

http://www.acg-gmbh.de/mod\_jk/ http://www.galatea.com/flashguides/apache-tomcat-24-win32.xml http://www.jguru.com/faq/view.jsp?EID=853905

MySQL

http://www.mysql.com/ http://www.phpmyadmin.net/

#### Thanks!

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